FIG.1

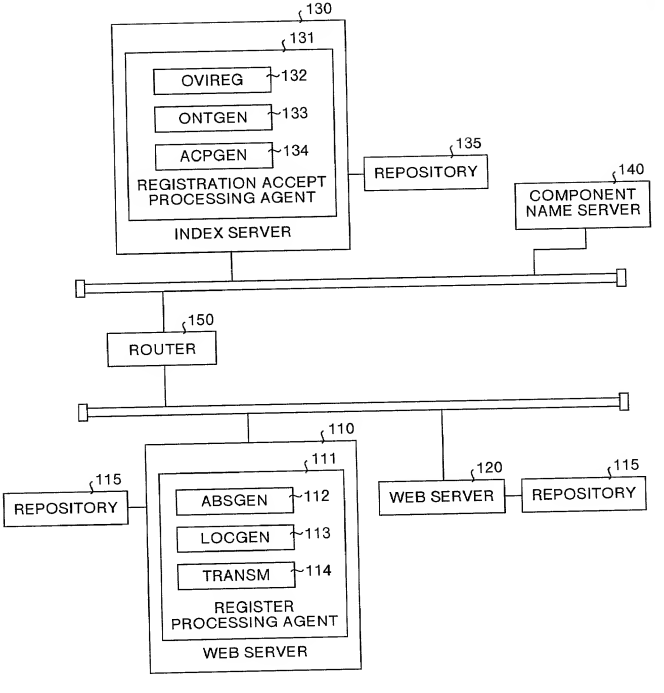

130
131
OVIREG
132
ONTGEN
133
ACPGEN
134
REGISTRATION ACCEPT PROCESSING AGENT
INDEX SERVER
135
REPOSITORY
140
COMPONENT NAME SERVER
150
ROUTER
110
111
ABSGEN
112
LOCGEN
113
TRANSM
114
REGISTER PROCESSING AGENT
WEB SERVER
115
REPOSITORY
120
WEB SERVER
115
REPOSITORY

FIG.2

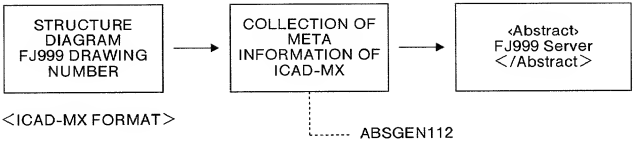

STRUCTURE DIAGRAM FJ999 DRAWING NUMBER
COLLECTION OF META INFORMATION OF ICAD-MX
‹Abstract›
FJ999 Server
‹/Abstract›
<ICAD-MX FORMAT>
ABSGEN112

FIG.3

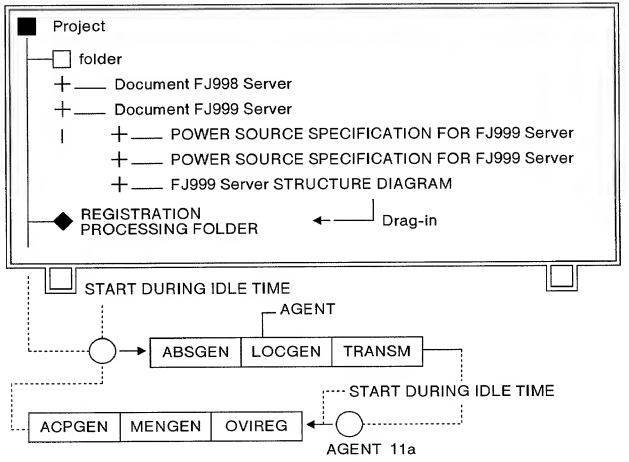

Project
folder
Document FJ998 Server
Document FJ999 Server
POWER SOURCE SPECIFICATION FOR FJ999 Server
POWER SOURCE SPECIFICATION FOR FJ999 Server
FJ999 Server STRUCTURE DIAGRAM
REGISTRATION PROCESSING FOLDER
Drag-in
START DURING IDLE TIME
AGENT
ABSGEN
LOCGEN
TRANSM
START DURING IDLE TIME
ACPGEN
MENGEN
OVIREG
AGENT 11a

FIG.4

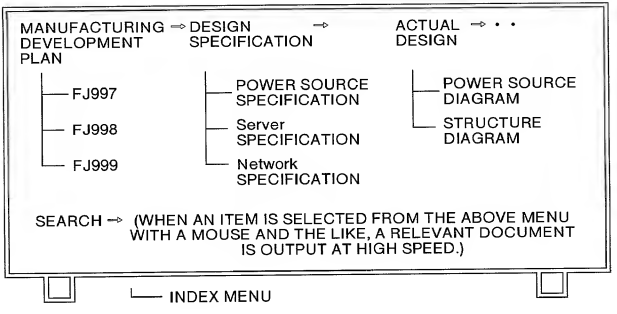

MANUFACTURING DEVELOPMENT PLAN
DESIGN SPECIFICATION
ACTUAL DESIGN
FJ997
FJ998
FJ999
POWER SOURCE SPECIFICATION
Server SPECIFICATION
Network SPECIFICATION
POWER SOURCE DIAGRAM
STRUCTURE DIAGRAM
SEARCH
(WHEN AN ITEM IS SELECTED FROM THE ABOVE MENU WITH A MOUSE AND THE LIKE, A RELEVANT DOCUMENT IS OUTPUT AT HIGH SPEED.)
INDEX MENU

FIG.5

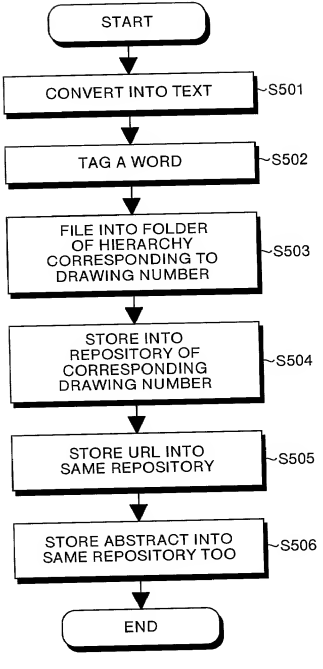

START
CONVERT INTO TEXT
S501
TAG A WORD
S502
FILE INTO FOLDER OF HIERARCHY CORRESPONDING TO DRAWING NUMBER
S503
STORE INTO REPOSITORY OF CORRESPONDING DRAWING NUMBER
S504
STORE URL INTO SAME REPOSITORY
S505
STORE ABSTRACT INTO SAME REPOSITORY TOO
S506
END

FIG.6

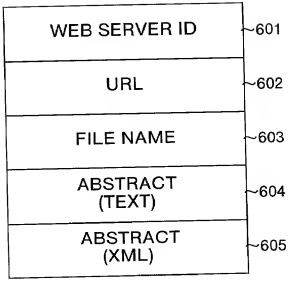

WEB SERVER ID
601
URL
602
FILE NAME
603
ABSTRACT (TEXT)
604
ABSTRACT (XML)
605

FIG.7

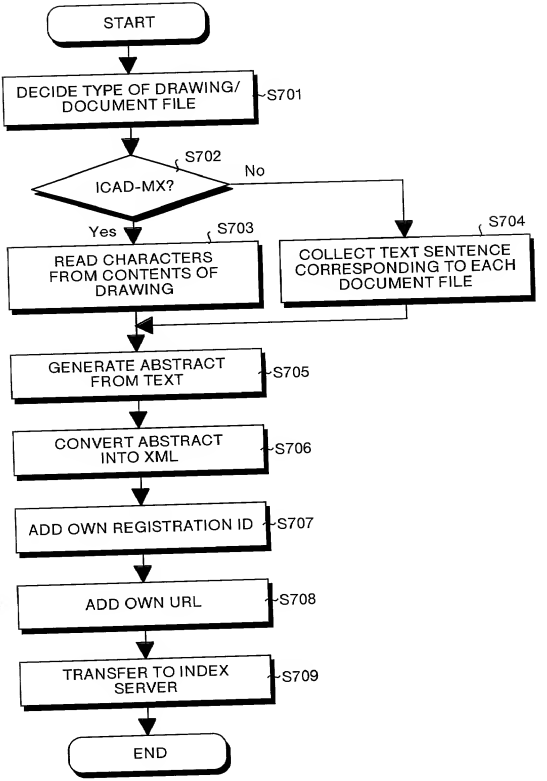

START
DECIDE TYPE OF DRAWING/ DOCUMENT FILE
S701
S702
ICAD-MX?
No
Yes
S703
READ CHARACTERS FROM CONTENTS OF DRAWING
S704
COLLECT TEXT SENTENCE CORRESPONDING TO EACH DOCUMENT FILE
GENERATE ABSTRACT FROM TEXT
S705
CONVERT ABSTRACT INTO XML
S706
ADD OWN REGISTRATION ID
S707
ADD OWN URL
S708
TRANSFER TO INDEX SERVER
S709
END

FIG.8

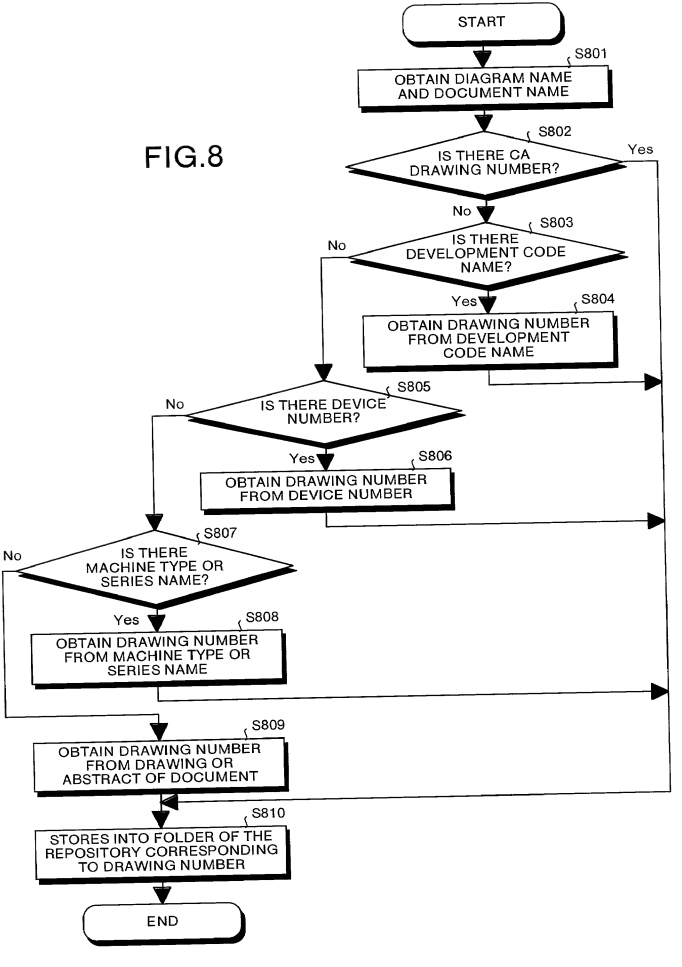

START
S801
OBTAIN DIAGRAM NAME AND DOCUMENT NAME
S802
IS THERE CA DRAWING NUMBER?
Yes
No
S803
IS THERE DEVELOPMENT CODE NAME?
No
Yes
S804
OBTAIN DRAWING NUMBER FROM DEVELOPMENT CODE NAME
S805
IS THERE DEVICE NUMBER?
No
Yes
S806
OBTAIN DRAWING NUMBER FROM DEVICE NUMBER
S807
IS THERE MACHINE TYPE OR SERIES NAME?
No
Yes
S808
OBTAIN DRAWING NUMBER FROM MACHINE TYPE OR SERIES NAME
S809
OBTAIN DRAWING NUMBER FROM DRAWING OR ABSTRACT OF DOCUMENT
S810
STORES INTO FOLDER OF THE REPOSITORY CORRESPONDING TO DRAWING NUMBER
END

FIG.9

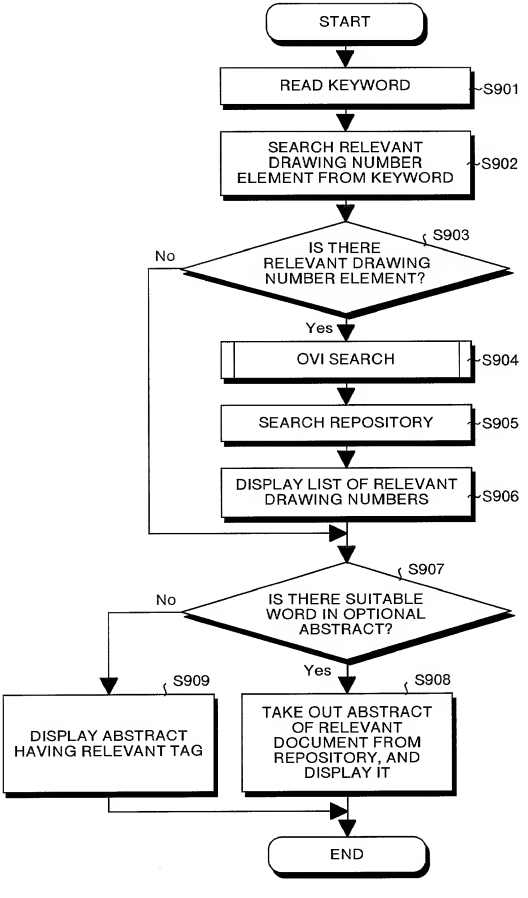

START
READ KEYWORD
S901
SEARCH RELEVANT DRAWING NUMBER ELEMENT FROM KEYWORD
S902
IS THERE RELEVANT DRAWING NUMBER ELEMENT?
S903
No
Yes
OVI SEARCH
S904
SEARCH REPOSITORY
S905
DISPLAY LIST OF RELEVANT DRAWING NUMBERS
S906
IS THERE SUITABLE WORD IN OPTIONAL ABSTRACT?
S907
No
Yes
DISPLAY ABSTRACT HAVING RELEVANT TAG
S909
TAKE OUT ABSTRACT OF RELEVANT DOCUMENT FROM REPOSITORY, AND DISPLAY IT
S908
END

FIG.10

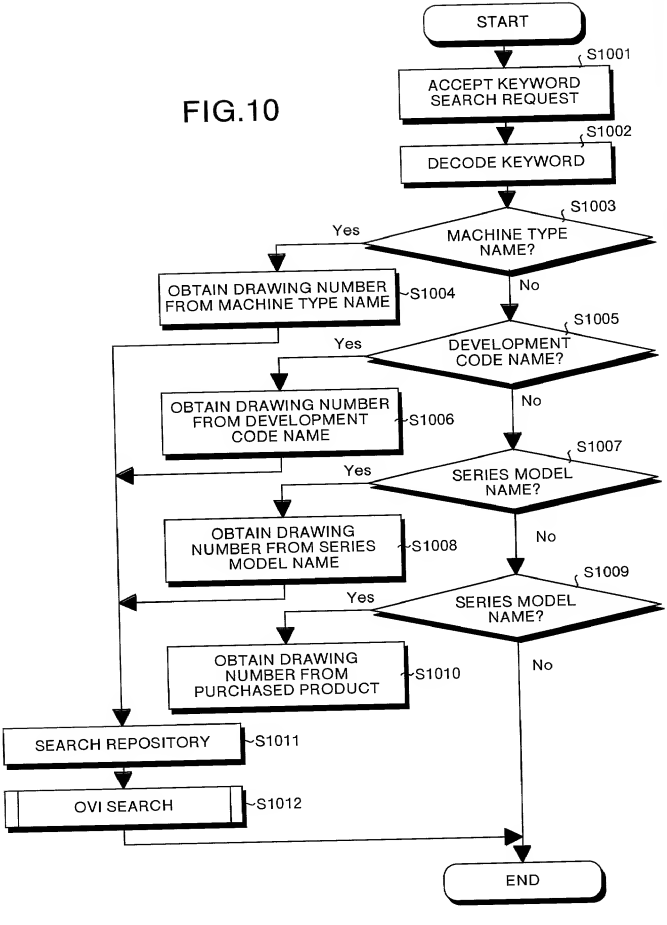

START
S1001
ACCEPT KEYWORD SEARCH REQUEST
S1002
DECODE KEYWORD
S1003
MACHINE TYPE NAME?
Yes
No
OBTAIN DRAWING NUMBER FROM MACHINE TYPE NAME
S1004
S1005
DEVELOPMENT CODE NAME?
Yes
No
OBTAIN DRAWING NUMBER FROM DEVELOPMENT CODE NAME
S1006
S1007
SERIES MODEL NAME?
Yes
No
OBTAIN DRAWING NUMBER FROM SERIES MODEL NAME
S1008
S1009
SERIES MODEL NAME?
Yes
No
OBTAIN DRAWING NUMBER FROM PURCHASED PRODUCT
S1010
SEARCH REPOSITORY
S1011
OVI SEARCH
S1012
END

FIG.11

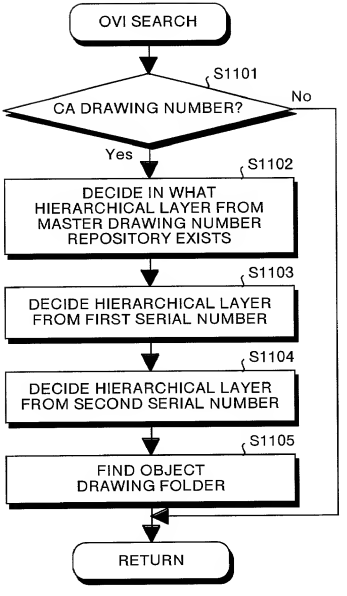

OVI SEARCH
S1101
CA DRAWING NUMBER?
No
Yes
S1102
DECIDE IN WHAT HIERARCHICAL LAYER FROM MASTER DRAWING NUMBER REPOSITORY EXISTS
S1103
DECIDE HIERARCHICAL LAYER FROM FIRST SERIAL NUMBER
S1104
DECIDE HIERARCHICAL LAYER FROM SECOND SERIAL NUMBER
S1105
FIND OBJECT DRAWING FOLDER
RETURN

FIG.12

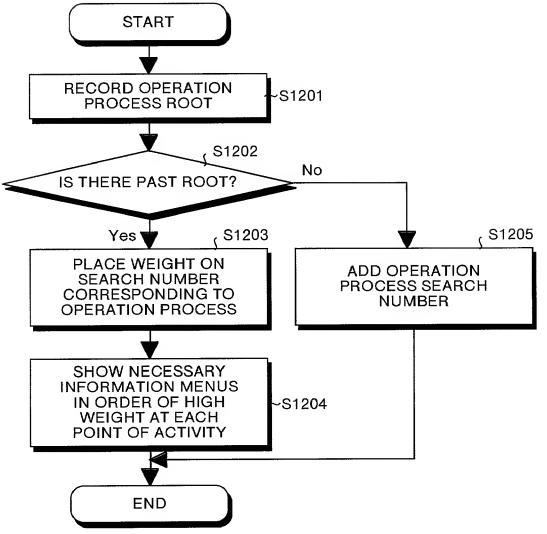

START
RECORD OPERATION PROCESS ROOT
S1201
S1202
IS THERE PAST ROOT?
No
Yes
S1203
PLACE WEIGHT ON SEARCH NUMBER CORRESPONDING TO OPERATION PROCESS
S1205
ADD OPERATION PROCESS SEARCH NUMBER
SHOW NECESSARY INFORMATION MENUS IN ORDER OF HIGH WEIGHT AT EACH POINT OF ACTIVITY
S1204
END

FIG.13

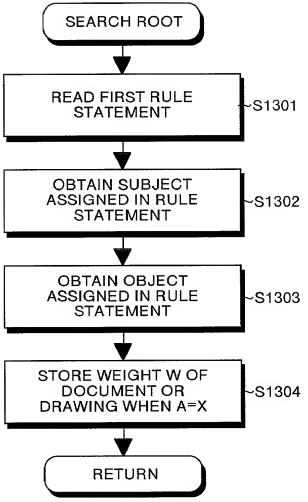

SEARCH ROOT
READ FIRST RULE STATEMENT
S1301
OBTAIN SUBJECT ASSIGNED IN RULE STATEMENT
S1302
OBTAIN OBJECT ASSIGNED IN RULE STATEMENT
S1303
STORE WEIGHT W OF DOCUMENT OR DRAWING WHEN A=X
S1304
RETURN

FIG.14A

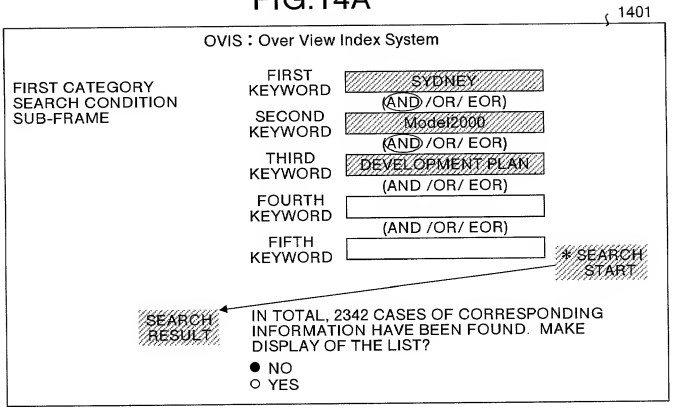



FIG.14B

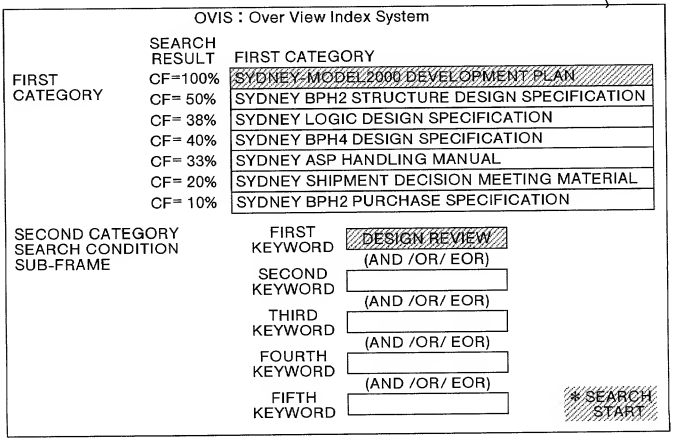


FIG.15A

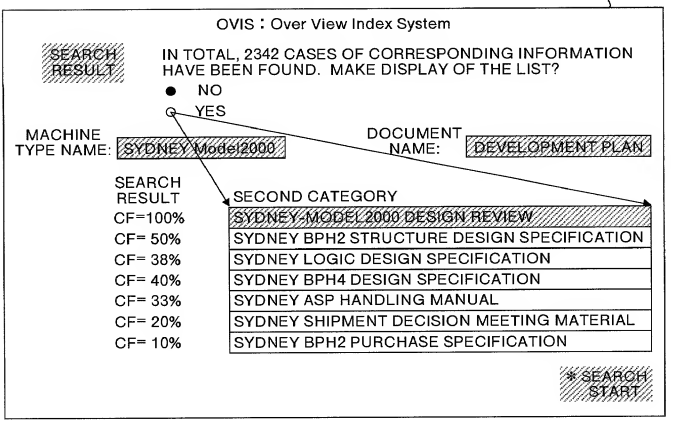



FIG.15B

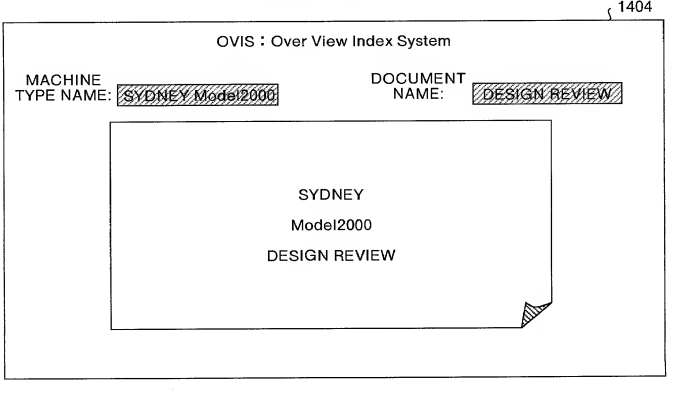


FIG.16A

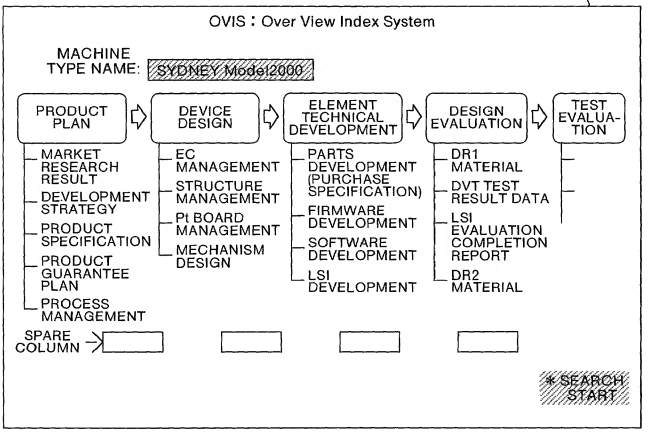



FIG.16B

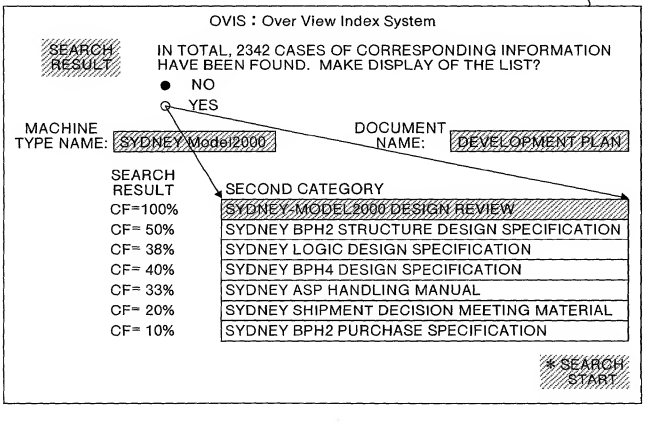


FIG.17

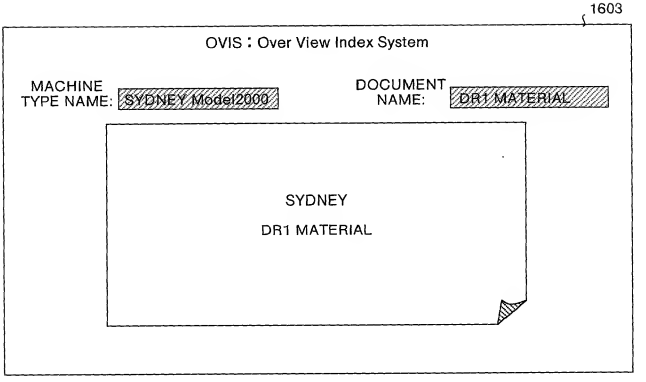

1603
OVIS : Over View Index System
MACHINE TYPE NAME:
SYDNEY Model2000
DOCUMENT NAME:
DR1 MATERIAL
SYDNEY
DR1 MATERIAL

FIG.18A

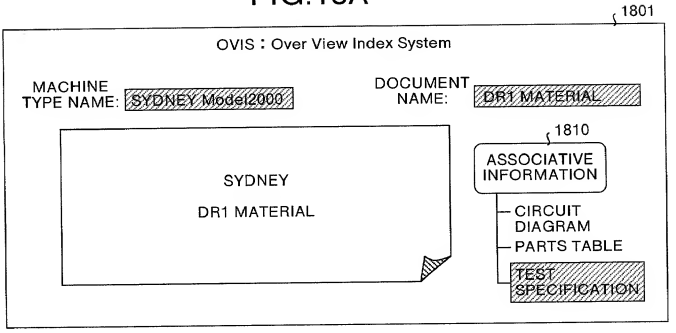



FIG.18B

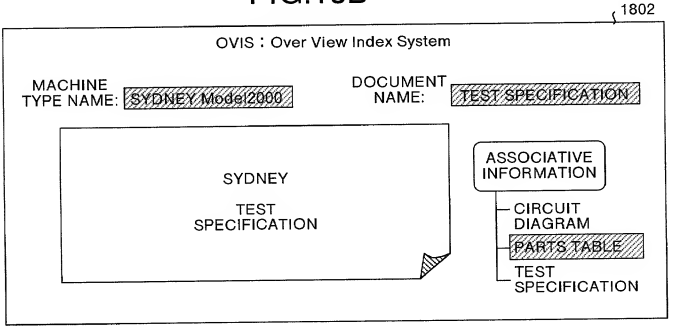



FIG.18C

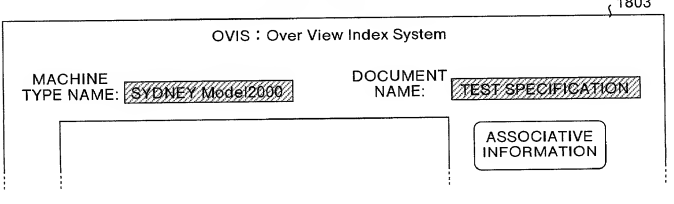


FIG.19A

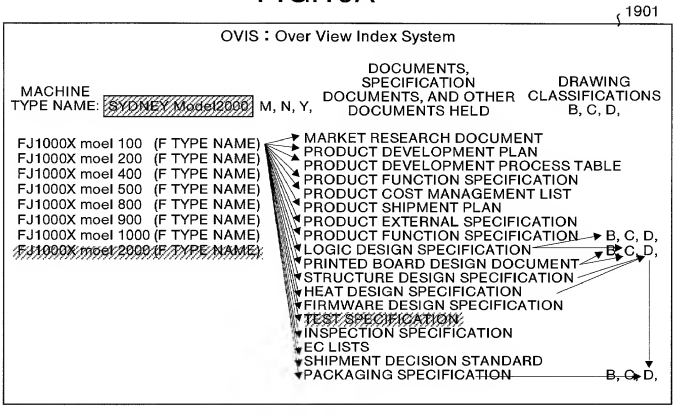
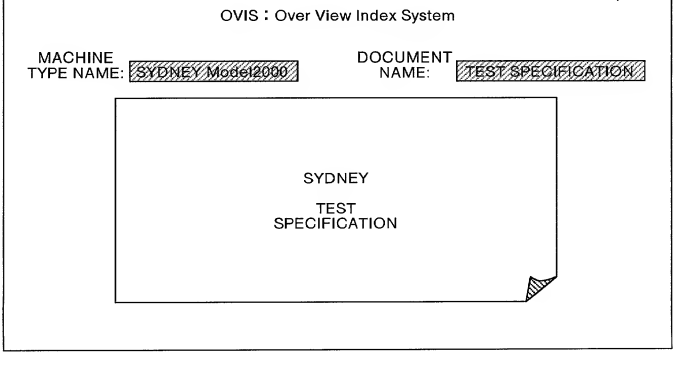
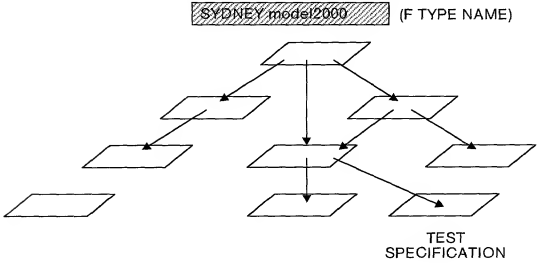



FIG.19B



# FIG.20

HIERARCHICAL STRUCTURE OF DOCUMENTS AND DRAWINGS